

# Executive Office

The Ziggurat • 707 Third Street, Eighth Floor • PO Box 989052 • West Sacramento, CA 95798-9052 • (916) 376-5000

October 28, 2002

The Honorable Steve Peace, Chair Joint Legislative Budget Committee State Capitol, Room 3060 Sacramento, CA 95814

Dear Senator Peace:

Senate Bill 5 (Chapter 7, Statutes of 2001, First Extraordinary Session) requires the Department of General Services (DGS) to submit quarterly reports to the Legislature and to the Governor on the \$40 million appropriated to the DGS for energy efficiency projects in state buildings and community colleges. The attached report entitled "Energy Efficiency Projects – SB 5X Legislative Report" fulfills this requirement.

The entire \$40 million appropriation for energy projects has been committed. A breakdown of the fund allocation is provided below:

- \$35.9 million has been committed for projects at 29 state facilities and community colleges. Currently, eight of the projects are completed and the remaining 21 projects are under construction, including the state's most recent solar project, which is currently operational and scheduled for final completion by the end of August 2002.
- \$3.6 million has been allocated for investment grade audits at 63 additional facilities.
  Twenty-five audits have been completed. Five audits have been approved by the
  Public Works Board for Energy Revenue Bond project funding. Eleven audits are
  being reviewed for consideration for funding opportunities through the Energy
  Revenue Bond Program.
- \$516,246 has been placed in a reserve contingency account to address unanticipated costs that may be realized during a project's development and construction (e.g. asbestos discovery and associated remediation).

When complete, cash funded projects will generate over \$4.8 million per year in energy savings, conserve 32,786 megawatt hours annually, and reduce peak load demand by eight megawatts. The average simple payback period for these projects is 7.4 years. Other projects resulting from the ongoing audits that get funded through the Energy Revenue Bond Program will result in additional energy savings and peak load reduction.

If you need further information or assistance, you may wish to have your staff contact Randy Ferguson, Program Director, Energy Management Office, Department of General Services, at 445-7656.

Very truly yours,

Clothilde V. Hewlett, Interim Director Department of General Services

CVH:cm

Attachment

cc: See attached Distribution List #8

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**Originating Office** 

SB X1 5--REVISED 03/11/02



# Energy Efficiency Projects - SB 5X Legislative Report

June 30, 2002

ENERGY MANAGEMENT OFFICE 717 K Street, Suite 409 Sacramento, CA 95814 (916) 323-8777

### PROJECTS IN CONSTRUCTION

Project Description / Measures	Projected On-Line Date	Project Cost	Annual Energy Savings / <u>Dollars</u>	kW Savings	Annual kWh <u>Savings</u>	Annual Therm Savings	Annual Water <u>Savings</u>	<u>kWh / \$</u> *
CCD, Cypress Community College								
Lighting - T-8 Lamps, Electronic Ballasts	3/6/2003	\$646,933	\$140,802	343	1,236,364	0	* -	28.67
HVAC - Boiler Replacements	3/6/2003	\$652,203	\$87,480	0	14,368		\$0	0.44
EMS - Energy Management Control System	3/6/2003	\$448,719	\$71,900	0 343	515,454	10,857	\$0 <b>\$0</b>	17.23 <b>16.63</b>
	-	\$1,747,855	\$300,182	343	1,766,186	72,214	\$0	10.03
CCD, Fullerton College								
Lighting - T-8 Lamps, Electronic Ballasts	5/6/2003	\$707,149	\$143,377	320	1,262,700	0	\$0	26.78
EMS - Replace and Expand Energy Management Control System	5/6/2003	\$429,324	\$73,095	91	664,500	0	\$0	23.22
Other - TES Installation, Boiler Replacements	5/6/2003	\$1,128,332	\$169,195	250	761,772		\$0	13.50
	-	\$2,264,805	\$385,667	661	2,688,972	58,500	\$0	20.41
CCD, Mt. San Jacinto College								
Lighting - T-8 Lamps, Electronic Ballasts	11/19/2002	\$76,076	\$25,410	47	140,000	0	\$0	27.60
HVAC - Zone Controls, Efficiency Motors	11/19/2002	\$286,967	\$65,522	137	361,000		\$0	25.16
EMS - Upgrade Energy Management Control System, Replace Points	11/19/2002	\$386,817	\$104,865	326	530,000	0	\$8,670	20.55
		\$749,860	\$195,797	510	1,031,000	0	\$8,670	22.92
CCD, Ohlone College								
Lighting - Motion Detectors	10/1/2002	\$10,496	\$6,494	0	90,200	0	\$0	128.91
EMS - Irrigation Control System	9/3/2002	\$23,316	\$5,000	0	90,200	0	\$5,000	126.91 N/A
Water - Occupancy Sensors for Sinks and Flush Valves	10/1/2002	\$39,218	\$5,000	0	0	0	\$5,000	N/A
Trade: Coodpanely Consolicites Chinic and Trade: Various	10/ 1/2002	\$73,030	\$16,494	0	90,200	-		128.91
CDC, Calipatria State Prison Lighting - Fluorescent / Incandescent Fixtures, LED Exit Signs	0/0/0000	<b>#004 400</b>	<b>#00.000</b>	000	4 004 004	•	<b>#</b> 0	00.40
HVAC - Cooling Towers, Pump Motors, VFDs, TES, EMS Expansion, Fans	2/3/2003	\$881,432	\$89,600	263	1,321,601		\$0 \$0	22.49
TVAC - Cooling Towers, Pump Motors, VPDs, TES, EMS Expansion, Pans	8/12/2003	\$4,236,749 \$5,118,181	\$613,429 <b>\$703,029</b>	1,890 <b>2,153</b>	7,996,863 <b>9,318,464</b>		* -	33.97 <b>32.08</b>
	-	ψ3,110,101	ψ103,023	2,133	3,310,404	•	Ψ0	32.00
CDC, Ironwood State Prison Project								
Lighting - T8 Lamps, Electronic Ballasts, Exit Lamps, Occupancy Sensors	6/27/2003	\$1,361,551	\$251,519	2,180	2,114,195		0	23.29
HVAC - Motor Replacements	6/27/2003	\$573,690	\$62,012	40	648,000		* * * * * * * * * * * * * * * * * * * *	22.59
	-	\$1,935,241	\$313,531	2,220	2,762,195	0	\$0	22.82
CDC, Susanville Gas Line Project								
Other - Gas Dist. System, Boilers, Propane Appl. Conv., Thermal Dist. System	9/16/2002	\$2,078,420	\$324,889	0	0	2,641,373	\$0	N/A
,	-	\$2,078,420	\$324,889	0	0			N/A
CVA Dollitt Nolcon Voyth Correctional Escility								
CYA, DeWitt Nelson Youth Correctional Facility Lighting - T8 Lamps, Electronic Ballasts	3/18/2002	\$118,913	\$21,248	16	118,042	0	\$0	14.89
Eighting 10 Earlipo, Elocitorilo Ballacio	0,10,2002	\$118,913	\$21,248	16	118,042			14.89

Project Description / Measures	Projected On-Line Date	Project Cost	Annual Energy Savings / <u>Dollars</u>	kW Savings	Annual kWh <u>Savings</u>	Annual Therm <u>Savings</u>	Annual Water <u>Savings</u>	<u>kWh / \$</u> *
CYA, El Paso De Robles School	-1-11					_		
ighting - T8 Lamps, Electronic Ballasts	8/21/2002	\$227,029 <b>\$227,029</b>	\$47,905 <b>\$47,905</b>	31 <b>31</b>	228,120 <b>228,120</b>	0		15.0 <b>15.0</b>
CYA, Fred C. Nelles School (Whittier)								
ighting - T8 Lamps, Electronic Ballasts	8/21/2002	\$381,143	\$47,303	33	242,578	0	\$0	9.5
	- -	\$381,143	\$47,303	33	242,578	0	\$0	9.5
YA, Herman Stark Youth Training School (Chino)								
ghting - T8 Lamps, Electronic Ballasts	8/21/2002	\$401,110	\$72,103	47	343,348			12.8
	-	\$401,110	\$72,103	47	343,348	0	\$0	12.8
YA, Karl Holton, Drug/Alch Treament Facility								
ighting - T8 Lamps, Electronic Ballasts	4/8/2002	\$95,383	\$39,294	24	179,412			28.3
	-	\$95,383	\$39,294	24	179,412	0	\$0	28.:
YA, Northern Calif. Correctional Reception Center & Clinic								
ighting - T8 Lamps, Electronic Ballasts	11/30/2001	\$235,675	\$18,627	12	120,174	0		7.0
	-	\$235,675	\$18,627	12	120,174	0	\$0	7.
YA, O.H. Close Youth Correctional Facility								
ghting - T8 Lamps, Electronic Ballasts	4/26/2002	\$92,291	\$42,495	32	236,084	0	\$0	38.
	-	\$92,291	\$42,495	32	236,084	0	\$0	38.
YA, Preston School of Industry (Ione)								
ighting - T8 Lamps, Electronic Ballasts	2/22/2002	\$419,013	\$32,966	29	212,682			7.
	-	\$419,013	\$32,966	29	212,682	0	\$0	7.
YA, South Reception Center (Norwalk)								
ighting - T8 Lamps, Electronic Ballasts	8/21/2002	\$235,675		16	120,174			7.
	-	\$235,675	\$23,554	16	120,174	0	\$0	7.0
YA, Ventura School (Camarillo)								
ighting - T8 Lamps, Electronic Ballasts	8/21/2002	\$320,651	\$49,453	29	215,011	0		10.
	-	\$320,651	\$49,453	29	215,011	0	\$0	10.0
GS, Justice Building Project								
ghting - T8 Lamps, Electronic Ballasts	2/26/2003	\$295,342	\$29,238	59	295,338	0		15.
VAC - Chiller, VSDs MS - Hardware and Software	2/26/2003 2/26/2003	\$749,106 \$433,629	\$109,545 \$84,829	58 170	1,106,513 732,691	0 24,294		29. 25.
MS - Haruware and Software	2/20/2003	\$1,478,077	\$223,612	287	2,134,542			25. <b>25</b> .
GS, Energy Commission Building Project								
ighting - Lighting and Lighting Control Systems	11/23/2002	\$178,668	\$20,909	0	209,093	0	\$0	17.
	-	\$178,668	\$20,909	0	209,093	0		17.
GS, Fresno Office Project								
ighting - T8 Lamps, Electronic Ballasts, Occupancy Sensors	3/7/2003	\$218,517	\$30,099	49	214,992	0	\$0	14.
IVAC - VSDs on Chiller and Pumps, Control System Modifications	3/7/2003	\$269,925	\$23,213	38	165,805			11.0
	-	\$488,442	\$53,312	87	380,797	0	\$0	12.
GS, Franchise Tax Board Phase II Project								
Other - Photo Voltaic Installation	7/26/2002	\$1,564,400	\$88,433	184	803,940			12.8
	-	\$1,564,400	\$88,433	184	803,940	0	\$0	12.

Project Description / Measures	Projected On-Line Date	Project Cost	Annual Energy Savings / <u>Dollars</u>	kW Savings	Annual kWh <u>Savings</u>	Annual Therm Savings	Annual Water <u>Savings</u>	<u>kWh / \$</u> *
DGS, Franchise Tax Board								
Lighting - HID and Fluorescent Lighting	11/18/2002	\$577,055	\$149,376	387	1,508,847	0		39.22
	-	\$577,055	\$149,376	387	1,508,847	0	\$0	39.22
DGS, Library Courts Bldg II Project								
Lighting - T8 Lamps, Electronic Ballasts, Reflectors	5/31/2002	\$153,460	\$23,210	73	401,873	0	\$0	39.28
Lightning To Earnpo, Elocatoria Ballacto, Nonocicio	0/01/2002	\$153,460	\$23,210	73	401,873	0		39.28
	-	, , , , , , , , , , , , , , , , , , , ,		-	, , , , , , , , , , , , , , , , , , , ,	-	• •	
DGS, Santa Rosa State Office								
HVAC -Motors, VFDs, Air Handler Units	8/30/2002	\$145,652	\$19,293	23	117,439	1,058	\$0	12.09
Water - Domestic Hot Water Controls	8/30/2002	\$716	\$170	0	1,206	37	\$0	16.84
	-	\$146,368	\$19,463	23	118,645	1,095	\$0	12.12
DOO Van News Office Business								
DGS, Van Nuys Office Project HVAC - VSDs for CHW, CW Pumps, CT Fans, CO Controls	6/28/2002	\$335,643	\$29,627	4	246,014	7,013	\$0	12.10
EMS - Energy Management Control System / DDC Controls	6/28/2002	\$99,507	\$19,670	0	167,020	4,062	\$0 \$0	13.19 25.18
Livio - Effergy Management Control System / DDC Controls	0/20/2002	\$435,150	\$49,297	4	413,034	11,075	\$0	15.95
	-	<b>V.00,.00</b>	¥ 10,201	•	,	,	<del></del>	
DMH, Atascadero State Hospital Project								
HVAC - Chiller / Boiler Replacement, Motors, Pumps, Deposit Control System	4/14/2003	\$4,901,000	\$620,276	740	5,089,160	-161,986	\$0	20.77
	-	\$4,901,000	\$620,276	740	5,089,160	-161,986	\$0	20.77
DMH, Patton State Hospital Project								
HVAC - Boiler Replacement	5/19/2003	\$7,052,872	\$639.039	54	398.932	698,666	\$0	1.13
Time Ballot Hapitacontolit		\$7,052,872	\$639,039	54	398,932	698,666	\$0	1.13
	·							
DMH, Patton State Hospital Phase II				_		_		
HVAC - Motors, VFDs	5/19/2003	\$152,763	\$23,826	0	158,731	0	\$0	20.78
EMS - New EMS System	5/19/2003	\$1,878,659	\$245,109	0	1,148,713	88,675	\$0	9.17
Other - Pumping System	5/19/2003	\$353,798 <b>\$2,385,220</b>	\$36,048 <b>\$304,983</b>	0	240,160 <b>1,547,604</b>	88,675	\$0 <b>\$0</b>	12.22 <b>10.22</b>
	-	φ2,303,220	φ304,903	<u> </u>	1,547,004	00,075	Φ0	10.22
DPR, Hearst Castle Lighting Retrofit								
Lighting - Lighting Retrofit	7/2/2002	\$59,970	\$10,743	32	107,428	0	\$0	26.87
	- -	\$59,970	\$10,743	32	107,428	0		26.87
Total of Projects in Construction		\$35,914,957	\$4,837,190	8.027	32,786,537	3,433,906	\$18,670	15.91

### AUDITS

Project Description	<u>Audits</u>
ARB, Haagen-Smit Laboratory	\$ 3,000
ARB, Headquarters	\$ 2,000
CC, Bakersfield College	\$ 6,936
CC, Copper Mountain College	\$ 962
CC, LA Harbor College	\$ 3,954
CC, Long Beach City College	\$ 16,302
CC, Merced College	\$ 7,315
CC, West Hills College	\$ 4,685
CC, West Valley College	\$ 4,692
CDC, California State Prison (Represa, New Folsom)	\$ 139,259
CDC, Chuckwalla	\$ 89,006
CDC, Correctional Training Facility (Soledad)	\$ 91,088
CDC, CSP-LA County	\$ 88,431
CDC, Deuel Vocational Institute (Tracy)	\$ 113,908
CDC, Galt Training Center (Galt)	\$ 52,261
CDC, Mule Creek State Prison (lone) CDC, North Kern State Prison	\$ 165,732
CDC, North Kern State Prison  CDC, Salinas Valley State Prison - Soledad II	\$ 101,732 42,164
CDC, San Quentin State Prison	\$ 6,754
CDE, School For The Deaf (Riverside)	\$ 91,168
CHP, Academy / Administrative Offices	\$ 40,568
CHP, Vallejo	\$ 42,127
DDS, Canyon Springs	\$ 3,000
DDS, Porterville Developmental Center	\$ 5,800
DGS, Bateson Building	\$ 51,481
DGS, Board of Equalization	\$ 48,043
DGS, DWR Fresno Annex	\$ 24,365
DGS, EDD Annex	\$ 54,686
DGS, EDD Headquarters	\$ 11,127
DGS, Edmund G. Brown Building (aka PUC)	\$ 90,803
DGS, Education Building	\$ 20,056
DGS, Elihu Harris Building (Oakland)	\$ 151,165
DGS, Heating & Cooling Plant	\$ 174,548
DGS, Junipero Serra Office (Los Angeles)	\$ 78,390
DGS, Legislative Office Building	\$ 46,463
DGS, Library & Courts Building I	\$ 3,000
DGS, Mission Valley Building (San Diego)	\$ 21,527
DGS, Personnel Building	\$ 29,298
DGS, Red Bluff State Building	\$ 6,575
DGS, Redding State Building	\$ 6,575
DGS, Resources Building	\$ 87,845
DGS, Ronald Reagan Building (Los Angeles)	\$ 245,172
DGS, San Diego Office	\$ 26,643
DGS, San Francisco Civic Center DGS, San Jose State Office	\$ 118,008 24,788
DGS, Santa Ana State Office	\$ 32,573
DGS, Secretary of State Building (State Archives)	\$ 51,571
DGS, State Capitol	\$ 67,216
DGS, State Capitol  DGS, State Printing Plant	\$ 48,832
DGS, Stockton State Building	\$ 49,634
DMH, Metropolitan State Hospital	\$ 240,689
DMH, Napa State Hospital - HVAC / Cogen	\$ 116,290
DMV, Los Angeles (Hope)	\$ 13,074
DMV, Sacramento ( 2415 / 2490 First)	\$ 98,376
DMV, Sacramento (4700 Broadway)	\$ 11,894
DSS, Dept. of Social Services (Fresno)	\$ 18,110
DVA, Barstow Veterans Home	\$ 79,816

Project Description	<u>Audits</u>
DWR, Delta Field Office	\$ 67,380
DWR, Oroville (Richvale) DWR, San Luis Obispo	\$ 70,763 54,089
EDD, Los Angeles (South Broadway)	\$ 4,750
EDD, San Jose	\$ 20,899
Lottery, California State Lottery Commission	\$ 79,439
TOTAL AUDITS	\$ 3,568,797

## RESERVE CONTINGENCY ACCOUNT

<u>Description</u> <u>Amount</u>

Reserve Contingency Account \$ 516,246

GRAND TOTAL \$40,000,000

(INCLUDES CONSTRUCTION, AUDITS AND RESERVE CONTINGENCY ACCOUNT)

CYA project information is provided by CYA.

EMD's energy savings calculations are based upon engineering estimates.

<sup>\* ((</sup>Annual kWh Savings \* Asset Life)/Project Cost) - Does not account for savings associated with natural gas and water.